**WHAT IS CLAIMED IS:**

1. A method of designing a semiconductor device, the method comprising:

maintaining a circuit design parameter file for a circuit being designed, the circuit design parameter file specifying a physical characteristic of the circuit;

monitoring a design environment to detect the addition of a circuitry component to the circuit;

accessing a component design parameter file that specifies at least one design parameter for that added circuitry component; and

updating the circuit design parameter file based on the at least one design parameter included in the component design parameter file.

2. The method of claim 1 further comprising providing the circuit designer with feedback concerning the physical characteristic of the circuit being designed.

3. The method of claim 1 further comprising allowing the circuit designer to request feedback concerning the physical characteristic of the circuit being designed.

4. The method of claim 3 further comprising providing the circuit designer with feedback concerning the physical characteristic of the circuit being designed in response to the circuit designer requesting the same.

5. The method of claim 1 wherein the physical characteristic is the total silicon area required to construct the circuit being designed, and the at least one design parameter is the silicon area required to construct the added circuitry component.

6. The method of claim 5 wherein said updating the circuit design parameter file includes recalculating the total silicon area required to construct the circuit being designed so that it includes the silicon area required to construct the added circuitry component.

7. The method of claim 1 wherein the physical characteristic is the total number of gates required to construct the circuit being designed, and the at least one design parameter is the number of gates required to construct the added circuitry component.

8. The method of claim 7 wherein said updating the circuit design parameter file includes recalculating the total number of gates required to construct the circuit being designed so that it includes the number of gates required to construct the added circuitry component.

9. The method of claim 1 wherein the physical characteristic is the total number of transistors required to construct the circuit being designed, and the at least one design parameter

is the number of transistors required to construct the added circuitry component.

10. The method of claim 9 wherein said updating the circuit design parameter file includes recalculating the total number of transistors required to construct the circuit being designed so that it includes the number of transistors required to construct the added circuitry component.

11. The method of claim 1 wherein the physical characteristic is the total number of cells required to construct the circuit being designed, and the at least one design parameter is the number of cells required to construct the added circuitry component.

12. The method of claim 11 wherein said updating the circuit design parameter file includes recalculating the total number of cells required to construct the circuit being designed so that it includes the number of cells required to construct the added circuitry component.

13. The method of claim 1 wherein the physical characteristic is the total amount of power required to power the circuit being designed, and the at least one design parameter is the amount of power required to power the added circuitry component.

13 14. The method of claim 12 wherein said updating the circuit design parameter file includes recalculating the total amount of power required to power the circuit being designed so that it includes the amount of power required to power the added circuitry component.

14 15. The method of claim 1 further comprising monitoring a design environment to detect the deletion of a circuitry component from the circuit being designed.

16 16. The method of claim 14 further comprising accessing a component design parameter file that specifies at least one design parameter for that deleted circuitry component.

16 17. The method of claim 16 further comprising updating the circuit design parameter file based on the at least one design parameter included in the component design parameter file for that deleted circuitry component.

18. An estimation process for designing a semiconductor device comprising:

a parameter file maintenance process for maintaining a circuit design parameter file for a circuit being designed, the circuit design parameter file specifying a physical characteristic of said circuit;

a design space monitoring process for monitoring a design environment to detect the addition of a circuitry component to said circuit;

a component file access process for accessing a component design parameter file that specifies at least one design parameter for said added circuitry component; and

a parameter file updating process for updating said circuit design parameter file based on said at least one design parameter included in said component design parameter file.

19. The process of claim 18 further comprising a feedback display process for providing the circuit designer with feedback concerning said physical characteristic of said circuit being designed.

20. The process of claim 18 further comprising a feedback request process for allowing the circuit designer to request feedback concerning said physical characteristic of said circuit being designed.

21. The process of claim 20 further comprising a feedback display process for providing the circuit designer with feedback concerning said physical characteristic of said circuit being designed in response to the circuit designer requesting the same.

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22. The process of claim 18 wherein said physical characteristic is the total silicon area required to construct said circuit being designed, and said at least one design parameter is the silicon area required to construct said added circuitry component.

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23. The process of claim 22 wherein said parameter file updating process includes an area recalculation process for recalculating the total silicon area required to construct said circuit being designed so that it includes the silicon area required to construct said added circuitry component.

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24. The process of claim 18 wherein said physical characteristic is the total number of gates required to construct said circuit being designed, and said at least one design parameter is the number of gates required to construct said added circuitry component.

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25. The process of claim 24 wherein said parameter file updating process includes a gate recalculation process for recalculating the total number of gates required to construct said circuit being designed so that it includes the number of gates required to construct said added circuitry component.

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26. The process of claim 18 wherein said physical characteristic is the total number of transistors required to construct said circuit being designed, and said at least one



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design parameter is the number of transistors required to construct said added circuitry component.

27. The process of claim 26 wherein said parameter file updating process includes a transistor recalculation process for recalculating the total number of transistors required to construct said circuit being designed so that it includes the number of transistors required to construct said added circuitry component.

28. The process of claim 18 wherein said physical characteristic is the total number of cells required to construct said circuit being designed, and said at least one design parameter is the number of cells required to construct said added circuitry component.

29. The process of claim 28 wherein said parameter file updating process includes a cell recalculation process for recalculating the total number of cells required to construct said circuit being designed so that it includes the number of cells required to construct said added circuitry component.

30. The process of claim 18 wherein said physical characteristic is the total amount of power required to power said circuit being designed, and said at least one design parameter is the amount of power required to power said added circuitry component.

31. The process of claim 30 wherein said parameter file updating process includes a power recalculation process for recalculating the total amount of power required to power said circuit being designed so that it includes the amount of power required to power said added circuitry component.

32. The process of claim 18 wherein said design space monitoring process is configured to monitor a design environment to detect the deletion of a circuitry component from the circuit being designed.

33. The process of claim 32 wherein said component file access process is configured to access said component design parameter file that specifies at least one design parameter for said deleted circuitry component.

34. The process of claim 33 wherein said parameter file updating process is configured to update said circuit design parameter file based on said at least one design parameter included in said component design parameter file for said deleted circuitry component.

35. A computer program product residing on a computer readable medium having a plurality of instructions stored thereon which, when executed by the processor, cause that processor to:

maintain a circuit design parameter file for a circuit being designed by a circuit designer, wherein the circuit design parameter file specifies a physical characteristic of the circuit;

monitor a design environment to detect the addition of a circuitry component to the circuit;

access a component design parameter file that specifies at least one design parameter for that added circuitry component; and

update the circuit design parameter file based on the at least one design parameter included in the component design parameter file.

36. The computer program product of claim 35 wherein said computer readable medium is a hard disk drive.

37. A processor and memory configured to:

maintain a circuit design parameter file for a circuit being designed by a circuit designer, wherein the circuit design parameter file specifies a physical characteristic of the circuit;

monitor a design environment to detect the addition of a circuitry component to the circuit;

access a component design parameter file that specifies at least one design parameter for that added circuitry component; and

update the circuit design parameter file based on the at least one design parameter included in the component design parameter file.

38. The processor and memory of claim 37 wherein said processor and memory are incorporated into a personal computer.